



PCT10

RAW SEQUENCE LISTING

DATE: 03/21/2002

PATENT APPLICATION: US/10/070,337

TIME: 14:56:42

Input Set : A:\ippf0742usn.app.txt

Output Set: N:\CRF3\03212002\J070337.raw

```

5 <110> APPLICANT: INCYTE GENOMICS, INC.
6     YUE, Henry
7     TANG, Y. Tom
8     BANDMAN, Olga
9     HILLMAN, Jennifer L.
10    BAUGHN, Mariah R.
11    AZIMZAI, Valda
12    LU, Dyung Aina M.
14 <120> TITLE OF INVENTION: PROTEIN PHOSPHATASE AND KINASE PROTEINS
16 <130> FILE REFERENCE: PF-0742 PCT
C--> 18 <140> CURRENT APPLICATION NUMBER: US/10/070,337
C--> 19 <141> CURRENT FILING DATE: 2002-02-27
21 <150> PRIOR APPLICATION NUMBER: 60/154,141
22 <151> PRIOR FILING DATE: 1999-09-15
24 <160> NUMBER OF SEQ ID NOS: 22
26 <170> SOFTWARE: PERL Program
28 <210> SEQ ID NO: 1
29 <211> LENGTH: 329
30 <212> TYPE: PRT
31 <213> ORGANISM: Homo sapiens
33 <220> FEATURE:
34 <221> NAME/KEY: misc_feature
35 <223> OTHER INFORMATION: Incyte ID NO: 365665CD1
37 <400> SEQUENCE: 1
38 Met Leu Asn Cys Ser Gln Asn Ser Ser Ser Ser Val Trp Trp
39   1                      5                      10                      15
40 Leu Lys Ser Pro Ala Phe Ser Ser Gly Ser Ser Glu Gly Asp Ser
41                      20                      25                      30
42 Pro Trp Ser Tyr Leu Asn Ser Ser Gly Ser Ser Trp Val Ser Leu
43                      35                      40                      45
44 Pro Gly Lys Met Arg Lys Glu Ile Leu Glu Ala Arg Thr Leu Gln
45                      50                      55                      60
46 Pro Asp Asp Phe Glu Lys Leu Leu Ala Gly Val Arg His Asp Trp
47                      65                      70                      75
48 Leu Phe Gln Arg Leu Glu Asn Thr Gly Val Phe Lys Pro Ser Gln
49                      80                      85                      90
50 Leu His Arg Ala His Ser Ala Leu Leu Lys Tyr Ser Lys Lys
51                      95                     100                     105
52 Ser Glu Leu Trp Thr Ala Gln Glu Thr Ile Val Tyr Leu Gly Asp
53                     110                     115                     120
54 Tyr Leu Thr Val Lys Lys Lys Gly Arg Gln Arg Asn Ala Phe Lrp
55                     125                     130                     135
56 Val His His Leu His Gln Glu Glu Ile Leu Gly Arg Tyr Val Gly

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57          140          145          150
58 Lys Asp Tyr Lys Glu Gln Lys Gly Leu Trp His His Phe Thr Asp
59          155          160          165
60 Val Glu Arg Gln Met Thr Ala Gln His Tyr Val Thr Glu Phe Asn
61          170          175          180
62 Lys Arg Leu Tyr Glu Gln Asn Ile Pro Thr Gln Ile Phe Tyr Ile
63          185          190          195
64 Pro Ser Thr Ile Leu Leu Ile Leu Glu Asp Lys Thr Ile Lys Gly
65          200          205          210
66 Cys Ile Ser Val Glu Pro Tyr Ile Leu Gly Glu Phe Val Lys Leu
67          215          220          225
68 Ser Asn Asn Thr Lys Val Val Lys Thr Glu Tyr Lys Ala Thr Glu
69          230          235          240
70 Tyr Gly Leu Ala Tyr Gly His Phe Ser Tyr Glu Phe Ser Asn His
71          245          250          255
72 Arg Asp Val Val Val Asp Leu Gln Gly Trp Val Thr Gly Asn Gly
73          260          265          270
74 Lys Gly Leu Ile Tyr Leu Thr Asp Pro Gln Ile His Ser Val Asp
75          275          280          285
76 Gln Lys Val Phe Thr Thr Asn Phe Gly Lys Arg Gly Ile Phe Tyr
77          290          295          300
78 Phe Phe Asn Asn Gln His Val Glu Cys Asn Glu Ile Cys His Arg
79          305          310          315
80 Leu Ser Leu Thr Arg Pro Ser Met Glu Lys Pro Cys Lys Ser
81          320          325
86 <210> SEQ ID NO: 2
87 <211> LENGTH: 141
88 <212> TYPE: PRT
89 <213> ORGANISM: Homo sapiens
91 <220> FEATURE:
92 <221> NAME/KEY: misc_feature
93 <223> OTHER INFORMATION: Incyte ID NO: 760934CD1
95 <400> SEQUENCE: 2
96 Met Leu Phe Thr Phe His Arg Glu Ser Leu Gln Met Ala Val Gly
97   1          5          10          15
98 Pro Phe Leu His Ile Leu Glu Ser Asn Leu Leu Lys Ala Met Asp
99          20          25          30
100 Ser Ala Thr Ala Pro Asp Lys Ile Arg Lys Leu Tyr Leu Tyr Ala
101          35          40          45
102 Ala His Asp Val Thr Phe Ile Pro Leu Leu Met Thr Leu Gly Ile
103          50          55          60
104 Phe Asp His Lys Trp Pro Pro Phe Ala Val Asp Leu Thr Met Glu
105          65          70          75
106 Leu Tyr Gln His Leu Glu Ser Lys Glu Trp Phe Val Gln Leu Tyr
107          80          85          90
108 Tyr His Gly Lys Glu Gln Val Pro Arg Gly Cys Pro Asp Gly Leu
109          95          100          105
110 Cys Pro Leu Asp Met Phe Leu Asn Ala Met Ser Val Tyr Thr Leu
111          110          115          120

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112 Ser Pro Glu Lys Tyr His Ala Leu Cys Ser Gln Thr Gln Val Met
113                               125                      130                      135
114 Glu Val Gly Asn Glu Glu
115                               140
120 <210> SEQ ID NO: 3
121 <211> LENGTH: 447
122 <212> TYPE: PRT
123 <213> ORGANISM: Homo sapiens
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126 <221> NAME/KEY: misc_feature
127 <223> OTHER INFORMATION: Incyte ID NO: 926043CD1
129 <400> SEQUENCE: 3
130 Met Gly Glu Asp Thr Asp Thr Arg Lys Ile Asn His Ser Phe Leu
131   1                               5                      10                      15
132 Arg Asp His Ser Tyr Val Thr Glu Ala Asp Ile Phe Ser Thr Val
133                               20                      25                      30
134 Glu Phe Asn His Thr Gly Glu Leu Leu Ala Thr Gly Asp Lys Gly
135                               35                      40                      45
136 Gly Arg Val Val Ile Phe Gln Arg Glu Pro Glu Ser Lys Asn Ala
137                               50                      55                      60
138 Pro His Ser Gln Gly Glu Tyr Asp Val Tyr Ser Thr Phe Gln Ser
139                               65                      70                      75
140 His Glu Pro Glu Phe Asp Tyr Leu Lys Ser Leu Glu Ile Glu Glu
141                               80                      85                      90
142 Lys Ile Asn Lys Ile Lys Trp Leu Pro Gln Gln Asn Ala Ala His
143                               95                      100                     105
144 Ser Leu Leu Ser Thr Asn Asp Lys Thr Ile Lys Leu Trp Lys Ile
145                               110                     115                     120
146 Thr Glu Arg Asp Lys Arg Pro Glu Gly Tyr Asn Leu Lys Asp Glu
147                               125                     130                     135
148 Glu Gly Lys Leu Lys Asp Leu Ser Thr Val Thr Ser Leu Gln Val
149                               140                     145                     150
150 Pro Val Leu Lys Pro Met Asp Leu Met Val Glu Val Ser Pro Arg
151                               155                     160                     165
152 Arg Ile Phe Ala Asn Gly His Thr Tyr His Ile Asn Ser Ile Ser
153                               170                     175                     180
154 Val Asn Ser Asp Cys Glu Thr Tyr Met Ser Ala Asp Asp Leu Arg
155                               185                     190                     195
156 Ile Asn Leu Trp His Leu Ala Ile Thr Asp Arg Ser Phe Asn Ile
157                               200                     205                     210
158 Val Asp Ile Lys Pro Ala Asn Met Glu Asp Leu Thr Glu Val Ile
159                               215                     220                     225
160 Thr Ala Ser Glu Phe His Pro His His Cys Asn Leu Phe Val Tyr
161                               230                     235                     240
162 Ser Ser Ser Lys Gly Ser Leu Arg Leu Cys Asp Met Arg Ala Ala
163                               245                     250                     255
164 Ala Leu Cys Asp Lys His Ser Lys Leu Phe Glu Glu Pro Glu Asp
165                               260                     265                     270
166 Pro Ser Asn Arg Ser Phe Phe Ser Glu Ile Ile Ser Ser Val Ser

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167          275          280          285
168 Asp Val Lys Phe Ser His Ser Gly Arg Tyr Met Leu Thr Arg Asp
169          290          295          300
170 Tyr Leu Thr Val Lys Val Trp Asp Leu Asn Met Glu Ala Arg Pro
171          305          310          315
172 Ile Glu Thr Tyr Gln Val His Asp Tyr Leu Arg Ser Lys Leu Cys
173          320          325          330
174 Ser Leu Tyr Glu Asn Asp Cys Ile Phe Asp Lys Phe Glu Cys Ala
175          335          340          345
176 Trp Asn Gly Ser Asp Ser Val Ile Met Thr Gly Ala Tyr Asn Asn
177          350          355          360
178 Phe Phe Arg Met Phe Asp Arg Asn Thr Lys Arg Asp Val Thr Leu
179          365          370          375
180 Glu Ala Ser Arg Glu Ser Ser Lys Pro Arg Ala Val Leu Lys Pro
181          380          385          390
182 Arg Arg Val Cys Val Gly Gly Lys Arg Arg Arg Asp Asp Ile Ser
183          395          400          405
184 Val Asp Ser Leu Asp Phe Thr Lys Lys Ile Leu His Thr Ala Trp
185          410          415          420
186 His Pro Ala Glu Asn Ile Ile Ala Ile Ala Ala Thr Asn Asn Leu
187          425          430          435
188 Tyr Ile Phe Gln Asp Lys Val Asn Ser Asp Met His
189          440          445
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195 <211> LENGTH: 666
196 <212> TYPE: PRT
197 <213> ORGANISM: Homo sapiens
199 <220> FEATURE:
200 <221> NAME/KEY: misc_feature
201 <223> OTHER INFORMATION: Incyte ID NO: 1234795CD1
203 <400> SEQUENCE: 4
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205 1 5 10 15
206 Val Ala Leu Leu Glu Ser Gly Thr Glu Lys Val Leu Leu Ile Asp
207 20 25 30
208 Ser Arg Pro Phe Val Glu Tyr Asn Thr Ser His Ile Leu Glu Ala
209 35 40 45
210 Ile Asn Ile Asn Cys Ser Lys Leu Met Lys Arg Arg Leu Gln Gln
211 50 55 60
212 Asp Lys Val Leu Ile Thr Glu Leu Ile Gln His Ser Ala Lys His
213 65 70 75
214 Lys Val Asp Ile Asp Cys Ser Gln Lys Val Val Val Tyr Asp Gln
215 80 85 90
216 Ser Ser Gln Asp Val Ala Ser Leu Ser Ser Asp Cys Phe Leu Thr
217 95 100 105
218 Val Leu Leu Gly Lys Leu Glu Lys Ser Phe Asn Ser Val His Leu
219 110 115 120
220 Leu Ala Gly Gly Phe Ala Glu Phe Ser Arg Cys Phe Pro Gly Leu
221 125 130 135

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Input Set : A:\ippf0742usn.app.txt

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222	Cys	Glu	Gly	Lys	Ser	Thr	Leu	Val	Pro	Thr	Cys	Ile	Ser	Gln	Pro
223					140					145					150
224	Cys	Leu	Pro	Val	Ala	Asn	Ile	Gly	Pro	Thr	Arg	Ile	Leu	Pro	Asn
225					155					160					165
226	Leu	Tyr	Leu	Gly	Cys	Gln	Arg	Asp	Val	Leu	Asn	Lys	Glu	Leu	Met
227					170					175					180
228	Gln	Gln	Asn	Gly	Ile	Gly	Tyr	Val	Leu	Asn	Ala	Ser	Asn	Thr	Cys
229					185					190					195
230	Pro	Lys	Pro	Asp	Phe	Ile	Pro	Glu	Ser	His	Phe	Leu	Arg	Val	Pro
231					200					205					210
232	Val	Asn	Asp	Ser	Phe	Cys	Glu	Lys	Ile	Leu	Pro	Trp	Leu	Asp	Lys
233					215					220					225
234	Ser	Val	Asp	Phe	Ile	Glu	Lys	Ala	Lys	Ala	Ser	Asn	Gly	Cys	Val
235					230					235					240
236	Leu	Val	His	Cys	Leu	Ala	Gly	Ile	Ser	Arg	Ser	Ala	Thr	Ile	Ala
237					245					250					255
238	Ile	Ala	Tyr	Ile	Met	Lys	Arg	Met	Asp	Met	Ser	Leu	Asp	Glu	Ala
239					260					265					270
240	Tyr	Arg	Phe	Val	Lys	Glu	Lys	Arg	Pro	Thr	Ile	Ser	Pro	Asn	Phe
241					275					280					285
242	Asn	Phe	Leu	Gly	Gln	Leu	Leu	Asp	Tyr	Glu	Lys	Lys	Ile	Lys	Asn
243					290					295					300
244	Gln	Thr	Gly	Ala	Ser	Gly	Pro	Lys	Ser	Lys	Leu	Lys	Leu	Leu	His
245					305					310					315
246	Leu	Glu	Lys	Pro	Asn	Glu	Pro	Val	Pro	Ala	Val	Ser	Glu	Gly	Gly
247					320					325					330
248	Gln	Lys	Ser	Glu	Thr	Pro	Leu	Ser	Pro	Pro	Cys	Ala	Asp	Ser	Ala
249					335					340					345
250	Thr	Ser	Glu	Ala	Ala	Gly	Gln	Arg	Pro	Val	His	Pro	Ala	Ser	Val
251					350					355					360
252	Pro	Ser	Val	Pro	Ser	Val	Gln	Pro	Ser	Leu	Leu	Glu	Asp	Ser	Pro
253					365					370					375
254	Leu	Val	Gln	Ala	Leu	Ser	Gly	Leu	His	Leu	Ser	Ala	Asp	Arg	Leu
255					380					385					390
256	Glu	Asp	Ser	Asn	Lys	Leu	Lys	Arg	Ser	Phe	Ser	Leu	Asp	Ile	Lys
257					395					400					405
258	Ser	Val	Ser	Tyr	Ser	Ala	Ser	Met	Ala	Ala	Ser	Leu	His	Gly	Phe
259					410					415					420
260	Ser	Ser	Ser	Glu	Asp	Ala	Leu	Glu	Tyr	Tyr	Lys	Pro	Ser	Thr	Thr
261					425					430					435
262	Leu	Asp	Gly	Thr	Asn	Lys	Leu	Cys	Gln	Phe	Ser	Pro	Val	Gln	Glu
263					440					445					450
264	Leu	Ser	Glu	Gln	Thr	Pro	Glu	Thr	Ser	Ser	Leu	Ile	Arg	Arg	Lys
265					455					460					465
266	Pro	Ala	Ser	Pro	Arg	Ser	Cys	Arg	Pro	Pro	Gly	Leu	Gln	Thr	Ala
267					470					475					480
268	Arg	Ala	Ser	Asp	Cys	Ile	Arg	Ser	Glu	Pro	Ala	Ala	Val	Ala	Pro
269					485					490					495
270	Pro	Arg	Gly	Pro	Phe	Tyr	Leu	His	Cys	Ile	Glu	Val	Gly	Ala	Trp

VERIFICATION SUMMARY

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DATE: 03/21/2002

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Input Set : A:\ippf0742usn.app.txt

Output Set: N:\CRF3\03212002\J070337.raw

L:18 M:270 C: Current Application Number differs, Replaced Current Application Number

L:19 M:271 C: Current Filing Date differs, Replaced Current Filing Date